Title (en)

A METHOD AND A DEVICE FOR PLANAR BEAM RADIOGRAPHY AND A RADIATION DETECTOR

Title (de)

VERFAHREN UND VORRICHTUNG ZUR FLACHSTRAHL-RADIOGRAPHIE UND STRAHLUNGSSENSOR

Title (fr)

PROCEDE ET DISPOSITIF DE RADIOGRAPHIE A FAISCEAU PLAN ET DETECTEUR DE RAYONNEMENT

Publication

EP 1029427 B1 20080806 (EN)

Application

EP 98950575 A 19981019

Priority

- SE 9801873 W 19981019
- SE 9704015 A 19971103

Abstract (en)

[origin: WO9923859A1] A method and apparatus for radiography, and especially for planar beam radiography, and also a detector for detecting incident radiation. In the method and apparatus, wherein X-rays (9) are emitted from an X-ray source (60), the X-rays are formed into a planar beam and are transmitted through an object to be imaged (62), and the X-rays transmitted through said object (62) are detected in a detector (64). The detector (64), which detects incident radiation is a gaseous parallel plate avalanche chamber, including electrode arrangements between which a voltage is applied for creating an electrical field, which causes electron-ion avalanches of primary and secondary ionization electrons released by incident radiation. The detector (64) is oriented, in relation to the incident radiation (9), so that the radiation enters sideways between a first and a second parallel plate, between which the electrical field is created. Electrical signals induced by said electron-ion avalanches are detected in at least one detector electrode arrangement, including a plurality of detector electrode elements arranged adjacent to each other, each along a direction being essentially parallel to the incident radiation. Pulses from each detector electrode element are processed in processing electronics, for obtaining values for each pixel corresponding to the respective detector electrode element.

IPC 8 full level

H05G 1/64 (2006.01); **A61B 6/00** (2006.01); **G01T 1/185** (2006.01); **G01T 1/28** (2006.01)

CPC (source: EP KR US)

G01T 1/185 (2013.01 - EP US); **G01T 1/28** (2013.01 - KR); **H05G 1/64** (2013.01 - EP US)

Citation (examination)

US 5521956 A 19960528 - CHARPAK GEORGES [FR]

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

Designated extension state (EPC)

AL LT LV MK RO SI

DOCDB simple family (publication)

WO 9923859 A1 19990514; AR 015981 A1 20010530; AT E404038 T1 20080815; AU 743023 B2 20020117; AU 9658198 A 19990524; CA 2309097 A1 19990514; CA 2309097 C 20080617; CN 1277795 A 20001220; CN 1299541 C 20070207; DE 1029427 T1 20010315; DE 69839847 D1 20080918; DK 1029427 T3 20081201; EP 1029427 A1 20000823; EP 1029427 B1 20080806; ES 2310012 T3 20081216; IL 135891 A0 20010520; IL 135891 A 20040104; IL 155980 A0 20031223; JP 2001521807 A 20011113; JP 4416318 B2 20100217; KR 100566109 B1 20060330; KR 20010031710 A 20010416; SE 513161 C2 20000717; SE 9704015 D0 19971103; SE 9704015 L 19990504; US 6118125 A 20000912

DOCDB simple family (application)

SE 9801873 W 19981019; AR P980105314 A 19981023; AT 98950575 T 19981019; AU 9658198 A 19981019; CA 2309097 A 19981019; CN 98810589 A 19981019; DE 69839847 T 19981019; DE 98950575 T 19981019; DK 98950575 T 19981019; EP 98950575 A 19981019; ES 98950575 T 19981019; IL 13589198 A 19981019; IL 15598098 A 19981019; JP 2000519582 A 19981019; KR 20007004773 A 20000502; SE 9704015 A 19971103; US 96955497 A 19971113